

Aves, Tyrannidae, *Platyrinchus leucoryphus* Wied, 1931: Distribution extension in Brazil

Vagner de Araujo Gabriel^{1*} and Jesse D'Arc Silva-Filho²

¹ Casa da Floresta Assessoria Ambiental Ltda., Avenida Joaninha Morganti, 289. CEP 13415-030. Piracicaba, SP, Brazil

² E.E.P.S.G. Candido Portinari, Praça Coronel Nogueira, 1. CEP 14300-000. Batatais, SP, Brazil.

* Corresponding autor: E-mail: vagner@casadafloresta.com.br

ABSTRACT: The Russet-winged Spadebill *Platyrinchus leucoryphus* Wied, 1831 is a passerine threatened by extinction. Its geographical distribution encompasses the Atlantic Forest of southeastern and southern Brazil, eastern Paraguay, and Misiones province in Argentina. In this note, we document the species for the first time in the state of Bahia (Brazil), extending its known distribution by 440 km northward.

The Russet-winged Spadebill *Platyrinchus leucoryphus* Wied, 1831 is a small passerine (12.5 cm, 18 g) endemic to the Atlantic Forest (Bencke *et al.* 2006; Brandt *et al.* 2008). It inhabits the understory of pristine and advanced secondary forests in lowlands, mountains and the interior plateau of southeastern Brazil (from central Espírito Santo to northeast Rio Grande do Sul states), eastern Paraguay and northeastern Argentina, in Misiones province (Belton 1973; Madroño *et al.* 1997; Sick 1997; Mazar-Barnett and Pearman 2001; Willis and Oniki 2003; Fitzpatrick *et al.* 2004; Esquivel *et al.* 2007; Brandt *et al.* 2008) (Figure 1). *Platyrinchus leucoryphus* occurs in low densities across its broad (ca. 426,000 km²) geographical range (BirdLife International 2011). According to BirdLife International (2011), recent surveys failed to find new populations of this species and current populations are known to be less extensive than previously thought. It is considered Vulnerable to extinction because its population is declining due to deforestation (BirdLife International 2011). Although the species prefers shady and tall well-preserved forests, Esquivel *et al.* (2007) found it in a degraded and isolated one hectare forest patch with an open understory created by cattle grazing in Paraguay.

In recent years, during a bird monitoring program focused on high conservation value forests project (Jennings *et al.* 2003) of Veracel Celulose S/A in southern state of Bahia, Brazil, we recorded *Platyrinchus leucoryphus* in three of the larger remnants of Atlantic Forest immersed in a matrix of eucalypt plantations, annual cultures, pastures, and some forest patches (Table 1). In May 2008, J. Silva-Filho registered one and three individuals of *P. leucoryphus* at the municipalities of Porto Seguro and Belmonte, respectively. They were identified by direct observation and vocal recognition, but pictures and song recordings could not be taken. Those individuals were similar to White-throated Spadebill *Platyrinchus mystaceus* Vieillot, 1818, but their upper parts show more contrast, as in *P. leucoryphus*. In addition, we heard a

sharp “fiu” call and, in two occasions, a 3-s whistled trill rising in pitch, ended up with a sudden “chin”, typical of *P. leucoryphus* (Sick 1997; BirdLife International 2011). An additional record was gathered by J. Silva-Filho in November 2008 at Belmonte. In this case, the call was recorded with a Sennheiser ME62 omnidirectional microphone and a parabolic dish connected to a Sony TCM-5000EV tape recorder (deposited at the Fonoteca Neotropical Jacques Viellard - FNJV 11890). Subsequently, in April 2009 V.A. Gabriel observed and heard some calls of another individual of *P. leucoryphus* in the municipality

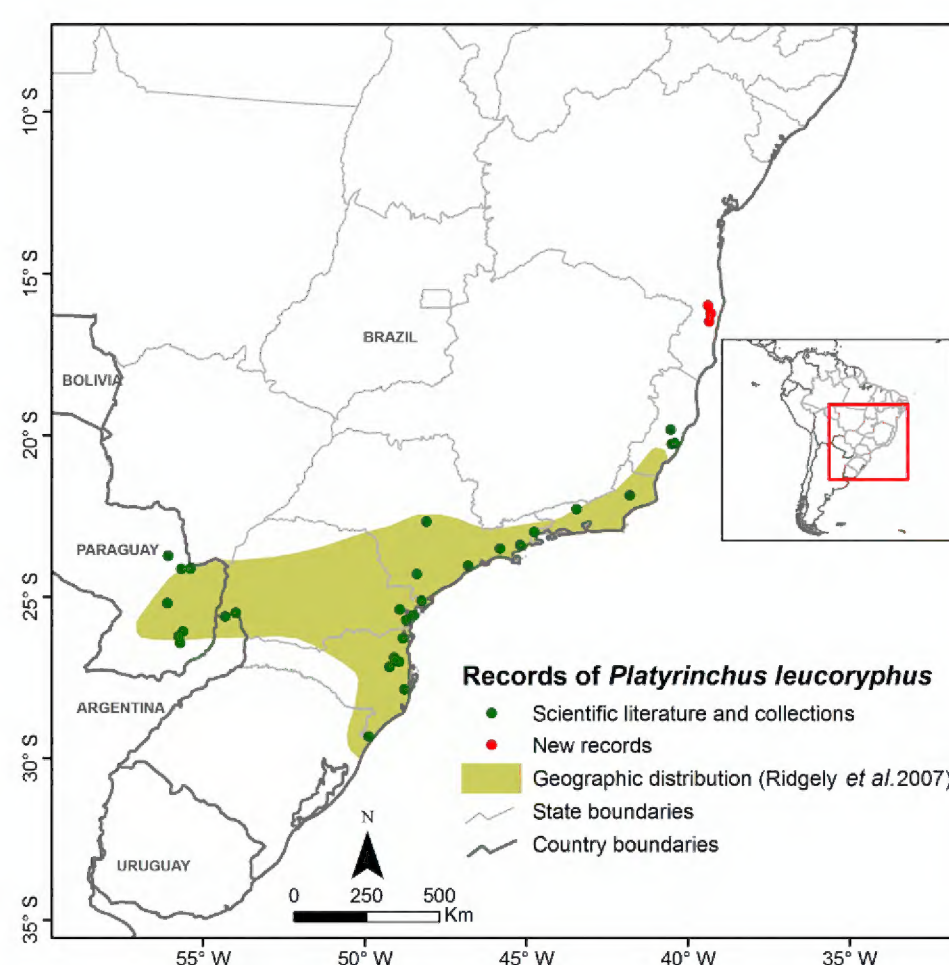


FIGURE 1. Geographical distribution of *Platyrinchus leucoryphus* in South America according to Ridgely *et al.* (2007), and records from literature (Belton 1973; Madroño *et al.* 1997; Mazar-Barnett and Pearman 2001; Willis and Oniki 2003; Bencke *et al.* 2006; Esquivel *et al.* 2007; Brandt *et al.* 2008; BirdLife International 2011), collections (Fonoteca Neotropical Jacques Viellard, Museu de Biologia Professor Mello Leitão and Instituto Adolfo Lutz) and new records from the state of Bahia, Brazil.

TABLE 1. First records of the Russet-winged Spadebill *Platyrinchus leucoryphus* in remnants of Atlantic forest localized at eucalypt plantation farms in southern Bahia state, Brazil.

MUNICIPALITY	LOCATION	AREA OF THE REMNANTS	COORDINATES	RECORDS
Porto Seguro	Santa Maria, a remnant adjacent to Parque Nacional Pau-brasil, localized at Santa Maria farm, 125 m a.s.l.	552.8 ha	16°29'28" S, 39°20'56" W	- 15 May 2008: one specimen observed;
Belmonte	Taquara, a remnant localized at Taquara and Copaíba farms, on the left bank of Jequitinhonha River, 176 m a.s.l.	1304.1 ha	15°59'47" S, 39°22'54" W	- 19 and 20 May 2008: three specimens were observed and heard, they were about 200 m from each other; - 15 Nov 2008: one specimen was heard and vocalization recorded;
Santa Cruz Cabrália	Sucupira, a remnant connected to other small patches by degraded riparian forests, immersed in eucalypt plantation matrix, at Água Branca and Santa Helena A farms, 111 m a.s.l.	536.6 ha	16°14'41" S, 39°17'26" W	- 1 Apr 2009: one specimen was observed and heard;

of Santa Cruz Cabrália. In all cases individuals were found in the understory of climax Atlantic Forest remnants at eucalypt plantation farms (Table 1).

Recorded calls were digitalized by Sony Vegas Pro 8.0 editing software and represented in a sonogram produced by Raven Lite 1.0 software (Cornell Laboratory of Ornithology). Comparing them with other recordings indexed in Fonoteca Neotropical Jacques Vielliard (Museu de Zoologia da Universidade Estadual de Campinas) we

were able to confirm the occurrence of *P. leucoryphus* in Bahia. For the comparisons we have used the recordings made by A. Aleixo and J. Vielliard in the municipalities of Sete Barras (São Paulo state) and Santa Tereza (Espírito Santo state), respectively. The call of *P. leucoryphus* is characterized by short-pulsed notes repeated about every 1.8 s and composed essentially by two harmonics. The call frequency of the recording we made was slightly higher than the recordings made in São Paulo and Espírito Santo

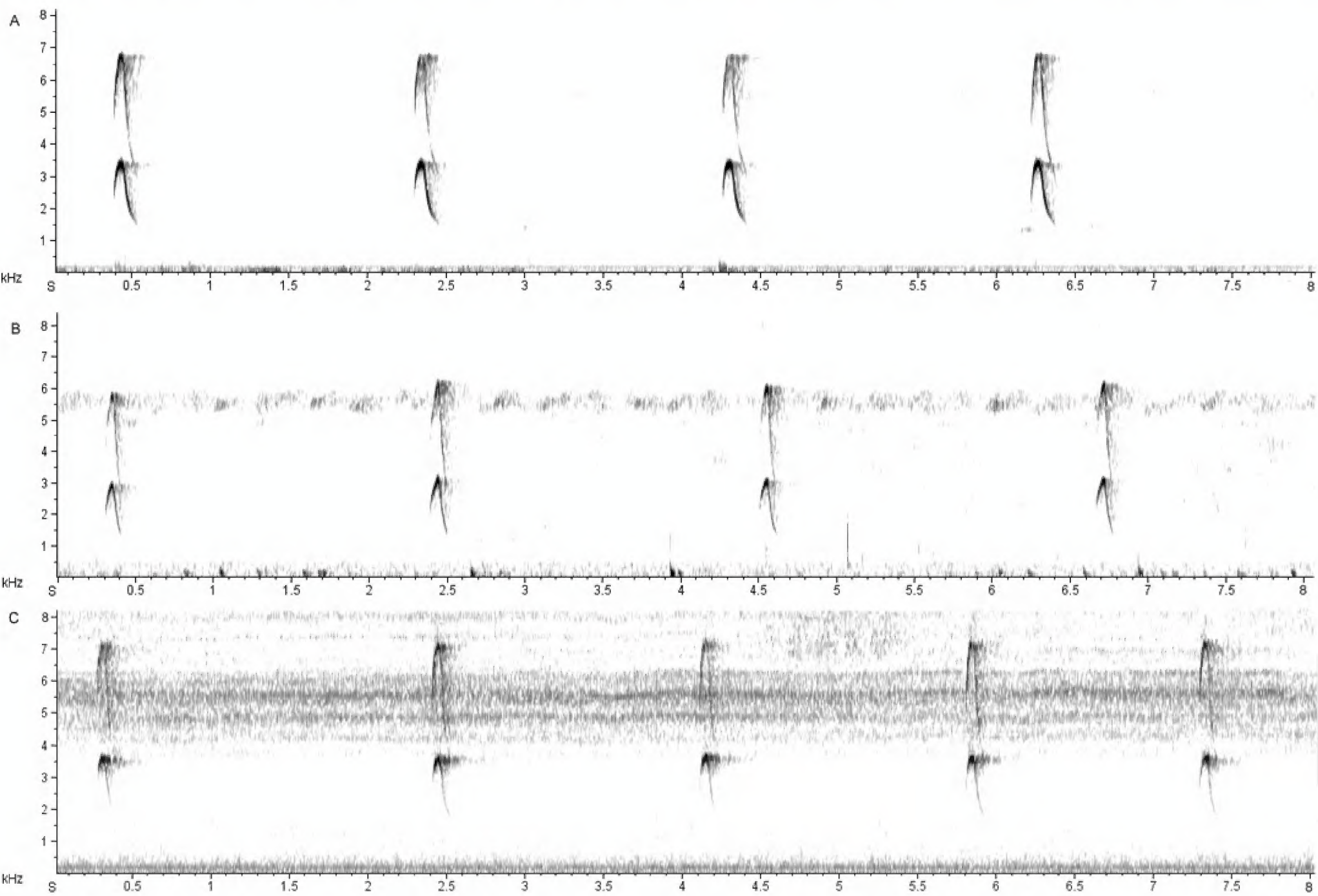


FIGURE 2. Sonograms of calls of *Platyrinchus leucoryphus* recorded by A. Aleixo at Parque Estadual Intervalles (Sete Barras, SP) (Sonogram A), by J. Vielliard at Reserva Nova Lombardia (Santa Tereza, ES) (Sonogram B), and by J. Silva-Filho (this study) in a remnant in Belmonte, Bahia state (Sonogram C). These recordings are placed at Fonoteca Neotropical Jacques Vielliard (Campinas) under catalog number 3783, 8997 and 11890, respectively.

states, which may represent an intraspecific difference because the spectral characteristics of the recordings are similar (Figure 2).

Records reported here are an important contribution to the knowledge of the geographical distribution and conservation of *P. leucoryphus* by extending its distribution about 440 km north of Santa Tereza municipality, state of Espírito Santo, the previously northernmost known distribution of the species. From this locality there is one specimen collected by J.E. Simon and R. Fadini in January 2000, deposited in the Museu de Biologia Mello Leitão (Vitória, ES), and a photo recently published by G. Magnago in the online Brazilian bird photo database (<http://www.wikiaves.com/315738>).

ACKNOWLEDGMENTS: The record made in southern Bahia state (Brazil) is the outcome of the fauna monitoring conducted by Casa da Floresta Assessoria Ambiental Ltda. at Eucalyptus plantation farms; we are grateful to the company Veracel Celulose S/A for financial and logistical support during the fieldwork. We are thankful to Wesley Silva and Milena Corbo that gently conceded us some recordings of *Platyrinchus leucoryphus* indexed in Fonoteca Neotropical Jacques Viellard. We are also in debt with César Cestari and Carlos O. Gussoni, which confirmed the identification. We would like to thank Simone Beatriz L. Raniere for map editing and João Gabriel Giovanelli for helping us to edit the sonograms. Finally we are grateful to Marco A. Pizo and Rodrigo A. Nobre for reviewing this note.

LITERATURE CITED

Belton, W. 1973. Some additional birds for the state of Rio Grande do Sul, Brazil. *Auk* 90(1): 94-99.

Bencke, G.A., G.N. Maurício, P.F. Develey and J.M. Goerck. 2006. *Áreas importantes para a conservação das aves no Brasil: parte 1 – estados do domínio da Mata Atlântica*. São Paulo: SAVE Brasil. 494 p.

BirdLife International. 2011. *Species factsheet: Platyrinchus leucoryphus*. Electronic database accessible at <http://www.birdlife.org>. Captured on 04 April 2011.

Brandt, C.S., C. Crieck, A.E. Rupp, D. Fink, G.T. Silva, G.T. and C.E. Zimmermann. 2008. Registros recentes de *Platyrinchus leucoryphus* (Wied, 1831) no estado de Santa Catarina, sul do Brasil. *Revista Brasileira de Ornitologia* 16(1): 67-69.

Fitzpatrick, J., J. Bates, K. Bostwick, I. Caballero, B. Clock, A. Farnsworth, P. Hosner, L. Joseph, G. Langham, D. Lebbin, J. Mobley, M. Robbins, E. Scholes, J. Tello, B. Walther and K. Zimmer. 2004. Family Tyrannidae (Tyrant-flycatchers); p. 170-465 In J. del Hoyo, A. Elliott, and D.A. Christie (ed.) *Handbook of the birds of the world. 9. Cotingas to Pipits and Wagtails*. Barcelona: Lynx Ediciones.

Esquivel, A.M., S.J. Peris, R. Fraga, R.P. Clay, A. Bodrati, H.D. Castilho, J. Klavins, M.C. Velásquez and A. Madroño. 2007. Status of the avifauna of San Rafael National Park, one of the last large fragments of Atlantic forest in Paraguay. *Bird Conservation International* 17(4): 301-317.

Jennings, S., R. Nussabaum, N. Judd and T. Evans. 2003. *Guia para florestas de alto valor de conservação*. Proforest: Oxford. 75 p. Electronic database accessible at http://assets.panda.org/downloads/hcvf_toolkit_final_portuguese.pdf. Captured on 15 May 2008.

Madroño, A.N., M.B. Robbins and K. Zyskooski. 1997. Contribución al conocimiento ornitológico del Bosque Atlántico interior del Paraguay: Parque Nacional Caaguazú, Caazapá. *Cotinga* 7(1): 54-60.

Mazar-Barnett, J. and M. Pearman. 2001. *Lista comentada de las aves argentinas*. Lynx Ediciones: Barcelona. 164 p.

Ridgely, R.S., T.F. Allnutt, T. Brooks, D.K. McNicol, D.W. Mehlman, B.E. Young and J.R. Zook. 2007. *Digital distribution maps of the birds of the Western Hemisphere. Version 3.0*. Arlington, USA: NatureServe. Electronic database accessible at <http://www.natureserve.org/getData/birdMaps.jsp>. Captured on 10 April 2011.

Sick, H. 1997. *Ornitologia brasileira*. Rio de Janeiro: Nova Fronteira. 912 p.

Willis, E.O. and Y. Oniki. 2003. *Aves do estado de São Paulo*. Rio Claro: Divisa. 400 p.

RECEIVED: June 2011

LAST REVISED: September 2011

ACCEPTED: September 2011

PUBLISHED ONLINE: December 2011

EDITORIAL RESPONSIBILITY: Leandro Bugoni